

REMARKS

In the Office Action dated July 11, 2007, claims 1-10 and 23-40 remained withdrawn and claims 11-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent 4,564,945 to Glover, et al. (Glover) in view of the United States Patent 5,392,299 to Rhines, et al. (Rhines). In this Amendment, Applicants have canceled claims 1-10 and 23-40. Applicants hereby reserve the right to pursue the subject matter of these canceled claims in divisional applications. Applicants have additionally canceled claims 17-18 and incorporated their subject matter into parent claim 11. Applicants have also amended claim 11 and added claims 41-43. Accordingly, claims 11-22 and 41-43 are currently pending in the application. Applicants respectfully request consideration of the remarks below.

A. Support for Amendments to Claim 11

Applicants respectfully submit that the amendments to claim 11 are supported by the original disclosure of the present application. Specifically, support for the first set of encoded data being stored in a row encode storage array is found in originally-filed claim 17 and in the specification on Page 12, lines 8-10. Support for the step of resetting the row encode storage array is found in originally-filed claim 18 and in the specification on Page 9, lines 22-24. Support for the separate X-axis, Y-axis and hyper-axis encoders is found in FIGS. 3 and 5 and in the specification on Page 11, lines 25-29. Therefore, Applicants respectfully submit that the amendments to claim 11 do not introduce any new matter.

B. Support for Newly Presented Claims 41-43

Applicants respectfully submit that newly presented claims 41-43 are supported by the original disclosure of the present application. Specifically, support for the encoders storing only the parity data finds support in the specification on Page 4, lines 31-32 and on Page 9, lines 6-9. Therefore, Applicants respectfully submit that newly presented claims 41-43 do not introduce any new matter.

C. Rejection of Claims 11-22 under §103(a)

Claims 11-22 stand rejected under §103(a) as being unpatentable over Glover in view of Rhines.

For a §103 obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. MPEP 2143.

Claim 11 has been amended to incorporate the subject matter of claims 17 and 18, reciting a method of encoding a block of data received from an input source, the block containing a plurality of information bits, the method comprising: receiving a row of the block; encoding the information bits in the row, thereby forming a first set of encoded data including a first parity data, wherein the first set of encoded data is generated according to a first encoding scheme and stored in a row encode storage array having a plurality of row array bits; and resetting the row encode storage array after the first set of encoded data is output, wherein all row array bits are set to zero.

Applicants respectfully submit that Glover, Rhines, and their hindsight combination fail to disclose, teach, or even suggest resetting the row encode storage array in response to the first set of encoded data being output, wherein all row array bits are set to zero, as recited in claim 11. Applicants cannot find any mention in either Glover or Rhines of resetting a row encode storage array in this manner. In fact, on page 8 of the Office Action dated July 11, 2007, Examiner even admits that neither Glover nor Rhines teaches this resetting step. Additionally, Examiner fails to provide any evidence of this resetting step being disclosed anywhere in the prior art. Therefore, Applicant respectfully submits that Examiner has failed to establish that all elements of the invention are disclosed in the prior art. Applicant respectfully requests that Examiner provide evidence of the claimed resetting step being disclosed in the prior art, or otherwise withdraw the rejection.

Furthermore, Applicant respectfully submits that Examiner has failed to establish that the prior art contains some suggestion or incentive that would have motivated the skilled artisan to make the proposed modification. Examiner argues that it would have been obvious to one of ordinary skill in the art to modify the teachings of Glover and Rhines by including the use of resetting the row encode storage array such that all row array bits are set to zero after the first set of encoded data is output because the values of

the C2 parity bits in Figures 4A, 4B and 5 in Rhines does not matter and one of ordinary skill in the art would have recognized that the use of this resetting step “would not have mattered since any previous values would be discarded and replaced with newly calculated C2 parity bits because the current C2 parity bits only depend on the current calculation.” Examiner’s statements fail to explain why the proposed modification would be desirable based on the prior art. Instead, Examiner relies on the argument that the modification would not matter. In other words, Examiner appears to be arguing that the proposed modification is obvious simply because it would not cause any harm. However, as stated in MPEP 2143.01(III), the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. Moreover, by stating that the resetting step would not have mattered, Examiner is actually admitting that there would be no reason why one ordinarily skilled in the art would modify the cited prior art to include this resetting step. Since Examiner has failed to establish the desirability of the proposed modification, Applicants respectfully submit that the prior art does not contain any suggestion or incentive that would have motivated the skilled artisan to make the proposed modification.

Additionally, claim 11 recites encoding the information bits in the row by an X-axis encoder, encoding the information bits in a column by a Y-axis encoder that is separate from the X-axis encoder, and hyper-diagonally encoding the information bits in the block by a hyper-axis encoder that is separate from the X-axis encoder and the Y-axis encoder. Applicants cannot find any mention in the cited prior art of the row, column and hyper-diagonal encoding steps being performed by the respective and separate X-axis, Y-axis and hyper-axis encoders as recited in claim 11. Applicants respectfully request that Examiner provide evidence of these claim elements being disclosed in the prior art, or otherwise withdraw the rejection.

Accordingly, Applicants respectfully submit that claim 11 is patentable over Glover in view of Rhines.

Since claims 12-16 and 19-22 depend from claim 11, Applicants respectfully submit that claims 12-16 and 19-22 are also patentable as they contain the same limitations as claim 11.

As mentioned above, Claims 17-18 have been canceled and their subject matter has been incorporated into claim 11.

In view of the foregoing, reconsideration and withdrawal of the §103(a) rejection is respectfully requested.

D. Patentability of Claims 41-43

Since claims 41-43 depend from claim 11, Applicants respectfully submit that claims 41-43 are also patentable as they contain the same limitations as claim 11.

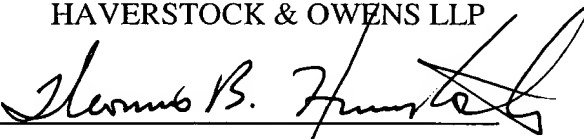
Additionally, claim 41 recites the X-axis encoder storing only the first parity data, claim 42 recites the Y-axis encoder storing only the second parity data, and claim 43 recites the hyper-axis encoder storing only the hyper parity data values. Applicants cannot find any mention in the cited prior art of X-axis, Y-axis and hyper-axis encoders having these storage limitations. Therefore, Applicants respectfully submit that the prior art fails to disclose all elements of claims 41-43. Additionally, Applicants cannot find any suggestion or incentive that would motivate one skilled in the art to modify the cited prior art to include these limitations.

Therefore, Applicants respectfully submit that claims 41-43 are non-obvious and patentable over the cited prior art.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that all claims, namely claims 11-22 and 41-43 are in condition for allowance. Reconsideration of the rejections is requested. Allowance is earnestly solicited at the earliest possible date. Should the Examiner have any questions or comments, the Examiner is encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

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Respectfully submitted;
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